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AF/2833





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **BOARD OF PATENT APPEALS AND INTERFERENCES**

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In re Application of:	x
Michael FRIEDOW et al.	Examiner: Edwin A. LEON CE NT
For: CONTACT ELEMENT FO AXIAL CONTACTING	CENTER 2800 CENTER 2800
Filed: December 17, 1999	: Art Unit: 2833
Serial No.: 09/466,400	: ·:
Assistant Commissioner for Patents Washington, D.C. 20231	United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on Date / / / Atty's Reg. # 33.865 Atty's Signature
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<u>APPEAL BRIEF TRANSMITTAL</u>

SIR:

Accompanying this Appeal Brief Transmittal is an Appeal Brief pursuant to 37 C.F.R. § 1.192(a) in triplicate for filing in the above-identified patent application.

The two-month appeal brief filing date is October 15, 2002. This is because Appellants mailed a Notice Of Appeal on August 8, 2002 (which was filed by the Patent Office on August 12, 2002) from the Final Office Action issued by the U.S. Patent and Trademark Office on February 8, 2002, so that the two-month appeal brief filing date is 10/25/2002 JWRC19 9500500 2002 (Since October 12, 2002 is a Saturday and October 14, 2002 is a Federal

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Holiday). CH While no fee is believed to be due, the Commissioner is authorized as necessary to charge any additional fees (including any Rule 136(a) extension fees) or credit any overpayment to Deposit Account No. 11-0600. A duplicate copy of this transmittal letter is enclosed for that purpose.

Respectfully submitted,

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[10191/1172]



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

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: Examiner: Edwin A. LEONGY CENTER 2800
: Art Unit: 2833

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CONTACT ELEMENT FOR

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Assistant Commissioner for Patents

Washington, D.C. 20231

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commission

D.C. 20231.

AARON C. DEDITCH

APPEAL BRIEF PURSUANT TO 37 C.F.R. § 1.192(a)

SIR:

In the above-identified patent application ("the present application"), Appellants mailed a Notice Of Appeal on August 8, 2002 (which was filed by the Patent Office on August 12, 2002) from the Final Office Action issued by the U.S. Patent and Trademark Office on February 8, 2002, so that the two-month appeal brief filing date is October 15, 2002 (since October 12, 2002 is a Saturday and October 14, 2002 is a Federal Holiday). In the Final Office Action, claims 1 and 3 to 19 were finally rejected.

A Response After A Final Office Action was mailed on May 10, 2002 (and filed on May 23, 2002). An Advisory Action was mailed on June 21, 2002.

In accordance with 37 C.F.R. § 1.192(a), this Appeal Brief is being submitted in triplicate in support of the appeal of the final rejections of claims 1 and 3 to 19. It is respectfully submitted that the final rejections of claims 1 and 3 to 19 should be reversed for the reasons set forth below.

1. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH ("Robert Bosch") of Stuttgart in the Federal Republic of Germany. Robert Bosch is the assignee of the entire right, title and interest in the present application.

2. RELATED APPEALS AND INTERFERENCES

There are no interferences or other appeals related to the present application, which "will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal".

3. STATUS OF CLAIMS

- 1. Claims 1 to 15 and 17 to 19 stand rejected under 35 U.S.C. § 103(a) as obvious over Togashi, U.S. Patent No. 5,772,470 ("the <u>Togashi</u> reference").
- 2. Claim 16 stands rejected under 35 U.S.C. § 103(a) as obvious over the <u>Togashi</u> reference in view of Beloritsky, U.S. Patent No. 6,036,540 ("the <u>Beloritsky</u> reference").

A copy of the appealed claims is attached hereto in the Appendix.

4. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on February 8, 2002, Appellants filed a Response After A Final Office Action ("the Response After Final"), which was mailed on May 10, 2002 (and filed on May 23, 2002).

5. SUMMARY OF THE INVENTION

The problem addressed by the subject matter of the claims is directed to the problem of electrically operated apparatuses, like hydraulic actuators, such as solenoid valves and pressure regulators, which must frequently be installed with a directional orientation in further processing, so that the electric contacts are located in a defined position. This is necessary, for example, when an arrangement of actuators is to be contacted jointly and electrically in one operation. For example, if the terminal contacts of the actuator are arranged laterally to its longitudinal axis, the position of the actuator must usually be changed, so that the terminal contacts can be connected to a suitable plug. In particular, the respective precise orientation of the actuators is an additional operation that is to be avoided. In addition, lateral contacting of the actuator leads to the result that tolerances in its longitudinal direction can

hardly be compensated because displacement in the direction of the longitudinal axis is possible only to a limited extent because the contact area of the internal contact is usually limited with radial contacting. In radial contacting, the direction of the joining of the actuator and of the plug contact are not identical, so that two assembly directions are necessary when assembling the actuator on a carrier and when assembling the plug on the apparatus, so the assembly operation must necessarily be sequential. (See specification at page 1, lines 7 to 21).

Therefore, an object of an exemplary embodiment of the present invention is to provide a device for contacting an electrically operated apparatus, so that the contacting can be accomplished with less orientation complexity, and so that tolerances in the longitudinal direction of the apparatus can be compensated easily. On the other hand, another object of an exemplary embodiment of the present invention is to permit simultaneous assembly of the apparatus and the plug. (See id. at page 1, line 25 to page 2, line 2).

According to an exemplary embodiment of the present invention, the terminal contact is oriented parallel to an installation direction of the apparatus, and the sleeve contact is connected to the terminal contact parallel to the installation direction. In particular, assembly of one or more apparatuses on a carrier and connecting the respective plugs to the apparatuses can be accomplished simultaneously by axial contacting. If the plugging direction of the plugs corresponds to the installation direction of the apparatuses, only a precise radial orientation of the plugs is necessary, and thus axial compensation of tolerance is possible in the installation direction of the apparatuses since the plugs need not be pushed onto the terminal contacts as far as the stop. Thus, for example, contacting with a punched grid may occur simultaneously with assembly of an actuator. At the manufacturing plant, the benefit is provided that one direction of assembly may be eliminated through the axial assembly of the plugs, so as to reduce the expense in terms of workpiece carriers and devices. (See id. at page 2, lines 4 to 18).

In an exemplary embodiment of the present invention, the plug has two sleeve contacts (arranged concentrically, in particular) that can be connected to two concentric terminal contacts of the apparatus. The electrically operated apparatus has two terminal contacts, which may be in a concentric arrangement, on the rear side (that is, on the side opposite the installation direction). The terminal contacts may be provided, for example, by two bushings arranged concentrically one inside the other. The contact on the inside may also be designed as a solid cylindrical contact (such as a contact pin). Then the sleeve contacts of

the plug are arranged concentrically one inside the other and fit together with the terminal contacts. The inside diameter of the sleeve contacts at the end may be such that they can be connected conveniently. For example, the front ends of the sleeves may be adapted to one another or may diverge conically. The sleeve contacts may each contact the concentric terminal contacts on the outside circumference when joined together. This results in an especially large contact area between the terminal contacts of the apparatus and the sleeve contacts. (See id. at page 2, line 20 to page 3, line 3).

In an exemplary embodiment of the present invention, the terminal contacts are two contact faces bent into a cylindrical shape and provided on the end of an apparatus casing. These contact faces have different diameters and are arranged accordingly, so that an insulation bushing may be inserted between the coaxial terminal contacts, and the two sleeve contacts of the plug may be inserted without causing a short circuit between the sleeve contacts and the terminal contacts. (See id. at page 3, lines 5 to 11).

Insulation may be arranged between the terminal contacts, and it may be made of plastic as an insulation sleeve. The insulation may also be applied as a nonconducting layer directly to the terminal contacts or the sleeve contacts. Different insulation materials may also be used with regard to a contacting force, to make it difficult to pull the contacts apart, for example. (See id. at page 3, lines 13 to 17).

In an exemplary embodiment of the present invention, in the assembled state the back wall of the plug also forms an insulation that acts together with the insulation between the terminal contact to form two contact chambers insulated from one another. This yields protection against metal chips at the contact point. The two poles of the contact are completely covered with respect to one another by the back plastic wall of the plug. No short circuit can develop due to a long sliver. Also, insulation on the outside may also completely cover the contact in the manner of a casing. The internal terminal contact with the adjacent internal sleeve contact is then separated by the insulation sleeve from the outer terminal contact with the adjacent outer sleeve contact. The outer end of the insulation sleeve is also in contact with the insulated back wall of the plug, so that the internal terminal contact is encapsulated. Only the connecting conductor leads radially out of the insulated area. (See id. at page 3, lines 19 to 30).

The printed conductor of the interior sleeve contact may be passed through a recess in the exterior sleeve contact. The sleeve contacts may be designed as cylindrical segments. A section of the essentially cylindrical segment remains free, with the printed conductor of the internal sleeve contact passing through this section and the sleeve contact on the outside. Instead of a cylindrical or segmented cylindrical cross section, the sleeve contact may also have a polygonal cross section. The advantage of this cross section is that the plug can no longer be rotated about its longitudinal axis or the installation direction with respect to the terminal contacts. (See id. at page 4, lines 1 to 10).

The sleeve contacts may have a diameter that allows a defined contacting force. The sleeve contacts may have inclined insertion guides to permit easy positioning of the terminal contacts. (See id. at page 4, lines 13 to 15).

The plugs may be connected to punched grid conductors. The sleeve contact and the corresponding punched grid conductor may be designed in one piece. The end of the punched grid conductor is designed to be somewhat wider than the punched grid conductor, and it may be bent to form the segmented cylindrical sleeve contact by bending or folding. This eliminates the need for an additional solder connection to connect the plug to the punched grid conductor. (See id. at page 4, lines 17 to 22).

As shown in Figure 1, the electrically operated apparatus, actuator 1, is installed in a machine 3 in an installation direction 2. A device for contacting the electrically operated actuator with a terminal contact 5 on the apparatus, a second terminal contact 6 on the apparatus and an insulation sleeve 7 arranged between them is provided at the end (that is, on one end side 4 of elongated actuator 1 opposite the installation direction). Terminal contact 5 has a larger diameter than terminal contact 6 (that is, terminal contact 5 is arranged to lie on the outside). A plug 8 is equipped with sleeve contacts 9 and 10 fitting terminal contacts 5 and 6. The plug 8 has an insulating back wall 11 and additional insulation 12 to prevent a short circuit between a punched grid conductor 13 connected to plug 8 with exposed metal objects. Terminal contacts 5, 6 as well as sleeve contacts 9, 10 are arranged concentrically about a longitudinal axis 14 running through actuator 1. During assembly, the actuator 1 is mounted on machine 3 in the installation direction, and plug 8 with sleeve contacts 9 and 10 is placed on terminal contacts 5 and 6 either subsequently or simultaneously and is connected to them. (See id. at page 5, lines 2 to 17).

As shown in Figure 2, the sleeve contacts 9 and 10 are designed only as segmented cylinders. Consequently, the punched grid conductor 15 of the interior sleeve contact 10 can be passed through recess 16 in exterior sleeve contact 9 without resulting in a short circuit. When the terminal contacts 5, 6 and sleeve contacts 9, 10 are joined, the insulation sleeve 7 with insulating back wall 11 of the plug forms a contact chamber around interior sleeve

contact 10 and interior terminal contact 6. This makes it possible to avoid short circuits produced by machining residues from production. (See id. at page 5, line 19 to 26).

In summary, the present invention is directed to a device for contacting an electrically operated apparatus, including: at least one terminal contact on a side of the apparatus, the at least one terminal contact being oriented parallel to an installation direction of the apparatus; and a plug for connecting axially to the at least one terminal contact, the plug including at least one sleeve contact, the at least one sleeve contact and the at least one terminal contact being adapted to be assembled together parallel to the installation direction, in which the at least one sleeve contact includes two concentric sleeve contacts and the at least one terminal contact includes two concentric terminal contacts, the two concentric sleeve contacts connecting to the two concentric terminal contacts. (See claim 1).

6. ISSUES

- 1. Under 35 U.S.C. § 103(a), are claims 1 to 15 and 17 to 19 patentable over Togashi, U.S. Patent No. 5,772,470 ("the <u>Togashi</u> reference")?
- 2. Under 35 U.S.C. § 103(a), is claim 16 patentable under 35 U.S.C. § 103(a) over the <u>Togashi</u> reference in view of Beloritsky, U.S. Patent No. 6,036,540 ("the <u>Beloritsky</u> reference")?

7. GROUPING OF CLAIMS

Group 1: Claims 1 and 3 to 19 stand or fall together.

8. ARGUMENT

Claims 1 to 15 and 17 to 19 stand rejected under 35 U.S.C. § 103(a) as obvious over Togashi, U.S. Patent No. 5,772,470 ("the <u>Togashi</u> reference").

The <u>Togashi</u> reference purportedly concerns a *coaxial connector* connected to an outer conductor of a horizontally-extending coaxial cable and holds an insulator in surrounding relation thereto. (<u>See Togashi</u>, Abstract). In the Office Actions, the text at lines 6 to 13 of column 5 of the <u>Togashi</u> reference was asserted against the rejected claims. That section, however, only indicates that the contact includes a central terminal portion for releasably fitting on a central terminal portion of a mating connector, and a central conductor clamp for horizontally clamping a central conductor of the coaxial cable. As indicated, this contact of an integral construction is formed by blanking and bending a single copper alloy sheet. (<u>See</u>

<u>Togashi</u>, col. 5, lines 6 to 13). The reference also indicates that the central terminal portion includes two downwardly-projecting terminal piece portions and that it has an inverted U-shaped vertical section. (See <u>Togashi</u>, col. 5, lines 14 to 17; see also <u>Togashi</u>, Figs. 1 to 5). Finally, the reference specifically states that it relates to a coaxial connector, such as a surface mounting-type coaxial connector for use in a portable telephone, a car telephone and a personal Handy-phone system, onto which a coaxial cable is connected. (See id. at col. 1, lines 5 to 11).

It is therefore respectfully submitted that any review of the <u>Togashi</u> reference makes plain that it simply does not in any describe or even suggest a device for contacting an electrically operated apparatus, in which "at least one sleeve contact and . . . at least one terminal contact [are] adapted to be assembled together parallel to the installation direction" of the electrically operated apparatus, and in which the "at least one sleeve contact includes two concentric sleeve contacts" and the "at least one terminal contact includes two concentric terminal contacts" so that the "two sleeve contacts connect to the two terminal contacts", as in claim 1 as presented. Accordingly, the <u>Togashi</u> reference simply does not describe (or even suggest) these features of claim 1.

Still further, the reference in no way provides a system for addressing the manufacturing problem identified in the present application, which is met by the features of claim 1.

In particular, the <u>Togashi</u> reference concerns a coaxial connector and not a device for contacting a device for contacting an electrically operated apparatus -- as that phrase is understood in the context of the present application. In this regard, the present application provides the following as regards the problems addressed and the solution and benefits provided by the subject matter of claim 1:

Electrically operated apparatuses, e.g., hydraulic actuators such as solenoid valves and pressure regulators, must frequently be installed with a directional orientation in further processing, so that the electric contacts are located in a defined position. This is necessary, for example, when an arrangement of actuators is to be contacted jointly and electrically in one operation. For example, if the terminal contacts of the actuator are arranged laterally to its longitudinal axis, the position of the actuator must usually be changed, so that the terminal contacts can be connected to a suitable plug. The respective precise orientation of the actuators is an additional operation that is to be avoided. In addition, lateral contacting of the actuator leads to the result that tolerances in its longitudinal direction can hardly be compensated because, with radial contacting, displacement in the direction of the longitudinal axis is possible only to a limited extent because the contact area of the internal

contact is usually limited. In radial contacting, the direction of joining of the actuator and of the plug contact are not identical, so two assembly directions are necessary when assembling the actuator on a carrier and when assembling the plug on the apparatus, so the assembly operation must necessarily be sequential.

[An object of an exemplary embodiment] is to provide a device for contacting an electrically operated apparatus, so that the contacting can be accomplished with less orientation complexity, and tolerances in the longitudinal direction of the apparatus can be compensated easily. [Another object] is to permit simultaneous assembly of the apparatus and the plug.

According to the [exemplary embodiment], the terminal contact is oriented parallel to an installation direction of the apparatus, and the sleeve contact can be connected to the terminal contact parallel to the installation direction.

It has been found . . . that assembly of one or more apparatuses on a carrier and connecting the respective plugs to the apparatuses can be accomplished simultaneously by axial contacting. If the plugging direction of the plugs corresponds to the installation direction of the apparatuses, only a precise radial orientation of the plugs is necessary, and thus axial compensation of tolerance is possible in the installation direction of the apparatuses due to the fact that the plugs need not be pushed onto the terminal contacts as far as the stop. Then contacting with a punched grid, for example, can take place simultaneously with assembly of an actuator. At the manufacturing plant, one direction of assembly may be eliminated through the axial assembly of the plugs, thereby reducing the expense in terms of workpiece carriers and devices.

. . . .

[When] the sleeve contacts are . . . each in contact with the concentric terminal contacts on the outside circumference when joined together. This results in an especially large contact area between the terminal contacts of the apparatus and the sleeve contacts.

In [another embodiment], the terminal contacts are two contact faces bent into a cylindrical shape in particular and provided on the end of an apparatus casing. These contact faces have different diameters and are arranged accordingly, so that an insulation bushing can optionally be inserted between the coaxial terminal contacts, and the two sleeve contacts of the plug can be inserted without causing a short circuit between the sleeve contacts and the terminal contacts.

(Specification, page 1, line 7 to page 3, line 11) (emphasis added). Accordingly, a coaxial connector is not a device for contacting an "electrically operated apparatus" -- as defined by the specification -- for addressing the manufacturing problem referred to in the present

application.

Also, the law plainly supports the foregoing eminently reasonable interpretation of "electrically operated apparatus" (namely, an actuator or the like) based on the specification. (See In re Weiss, 26 U.S.P.Q.2d 1885, 1887 (Fed. Cir. 1993) (when interpreting a claim term or phrase, one must "look to the specification for the meaning ascribed to that term"; Board reversed) (unpublished decision); In re Okuzawa, 190 U.S.P.Q. 464, 466 (C.C.P.A. 1976) ("claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their broadest reasonable interpretation"; Board reversed; emphasis in original) (citing In re Royka, 180 U.S.P.Q. 580, 582-83 (C.C.P.A. 1974) (claims are "not to be read in a vacuum and while it is true that they are to be given the broadest reasonable interpretation during prosecution, their terms still have to be given the meaning called for by the specification of which they form a part"; Board reversed; emphasis in original); and In re Rohrbacher, 128 U.S.P.Q. 117, 119 (C.C.P.A. 1960) (an "applicant is his own lexicographer and words used in his claims are to be interpreted in the sense in which they are used in the specification"; Board reversed)). It is respectfully submitted that this is exactly the case here since contrary to the foregoing law, the Office Actions simply reflect an unreasonable reading of "electrically operated apparatus" without regard to the sense in which those terms are used in the specification.

As to the Office Actions' reliance on Ex parte Masham, 2 U.S.P.Q. 2d 1647 (1982), that case is totally inapposite for the proposition cited, since that case involved an anticipation rejection -- and not an obviousness rejection. It is believed to be axiomatic that the Federal Circuit has made plain that the proposition relied upon is limited to an anticipation rejection -- and not an obviousness rejection.

It is therefore respectfully submitted that claim 1 is allowable.

Since claims 3 to 19 depend from claim 1, these claims are allowable for the same reasons as claim 1.

Claim 16 stands rejected under 35 U.S.C. § 103(a) as obvious over the <u>Togashi</u> reference in view of Beloritsky, U.S. Patent No. 6,036,540 ("the <u>Beloritsky</u> reference").

As discussed above, the primary <u>Togashi</u> reference does not in any way disclose or suggest the features of claim 1. Since claim 16 depends from claim 1, the <u>Togashi</u> reference does not in any way disclose or suggest the features of claim 16 for essentially the same reasons as claim 1. The secondary <u>Beloritsky</u> reference purportedly concerns a coaxial connector including a substantially cylindrical ring contact and a receptacle shell. (<u>See</u>

<u>Beloritsky</u>, Abstract). Any review of the <u>Beloritsky</u> reference makes plain that it simply does not cure the critical deficiencies of the <u>Togashi</u> reference with respect to the features of claim 1 discussed above, especially since it also concerns a coaxial connector. It is therefore respectfully submitted that claim 16 is allowable over the references as applied.

As further regard the obviousness rejections, in the Response to Arguments, the Office Action effectively admits that the Togashi reference does not describe or even suggest that at least one terminal including two concentric terminal contacts, and that the two sleeves contacts connect the two terminal contacts, but asserts that because an "explanation of why this feature is critical to the invention" was not given then it is the "Examiner's opinion that this feature is an obvious matter of design choice." Applicants respectfully suggests that the specification describes the usefulness of the claimed features in the subject application. As explained above (for example, with respect to page 1, line 25 to page 2, line 2 of the specification), the specification makes plain that the contacting is accomplished with less orientation complexity and better compensation of tolerances in the longitudinal direction of the electrically operated apparatus (which is a solenoid or the like). Further, at page 3, line 1 to 3, the specification provides that, in at least one exemplary embodiment, the sleeve contacts are each in contact with the concentric terminal contacts on the outside circumference and joined together resulting in an especially large contact area between the terminal contacts of the apparatus and the sleeve contacts. The specification beginning at page 3, line 5 describes further advantages to having the arrangement as claimed in claim 1.

Indeed, in view of the foregoing, the subject application provides *additional and different* features that are not described in the <u>Togashi</u> reference, unlike situations where it is merely a difference in dimensions, or the like (to which is what it appears the Office Action is alluding). Further, in view of the foregoing, there are advantages to the arrangement as claimed in at least claim 1 and as described throughout the specification of the subject application.

Still further, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim element and it must also suggest combining the elements in the manner contemplated by the claim. (See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990)). Thus, the "problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem." (See Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir.

1998)). It is respectfully submitted that, as discussed above, the references relied on, whether taken alone or combined, do not suggest in any way modifying or combining the references so as to provide the presently claimed subject matter for addressing the problems referred to above and in the specification, as discussed above.

Moreover, the Federal Circuit in the case of <u>In re Kotzab</u> has made plain that even if a claim concerns a "technologically simple concept" -- which is not believed to be the case here, there still must be some finding as to the "specific understanding or principle within the knowledge of a skilled artisan" that would motivate a person having no knowledge of the claimed subject matter to "make the combination in the manner claimed" to provide the advantages and/or benefits of the claimed subject matter, stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

(See In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Federal Circuit 2000) (italics added)). Here again, there have been no such findings to establish that the features discussed above of the rejected claims are met by the references relied upon. As referred to above, any review of the references, whether taken alone or combined, makes plain that they simply do not describe the features discussed above of the rejected claims.

The cases of <u>In re Fine</u>, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988), and <u>In re Jones</u>, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), also make plain that the Final Office Action's generalized assertions that it would have been obvious to modify the reference(s) relied upon do not properly support a § 103 rejection. It is respectfully suggested that those cases make plain that the Final Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of <u>In re Fine</u> stated that:

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some

objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

. . . .

Instead, the Examiner relies on hindsight in reaching his obviousness determination.... One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

(In re Fine, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added)). Incredibly, the Final Office Action actually admits that it uses hindsight, and the obviousness rejections should therefore be reversed for that reason alone. (See Final Office Action, page 7, paragraph 5).

Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill... would have been motivated to make the modifications... necessary to arrive at the claimed [invention].

(In re Jones, 21 U.S.P.Q.2d at 1943 & 1944 (citations omitted; italics in original)).

That is exactly the case here since it is believed and respectfully submitted that the Office Actions to date offer only conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Accordingly, it is respectfully submitted that the assertions to date in this regard are insufficient since the Office must provide proper evidence of a motivation or suggestion for modifying a reference to provide the claimed subject matter.

In short, there is no evidence that the references relied upon, whether taken alone, combined or modified, would provide the features of the claims discussed above. It is therefore respectfully submitted that the claims are allowable for these reasons.

As further regards all of the obviousness rejections of the claims, it is respectfully submitted that not even a *prima facie* case has been made in the present case for obviousness,

since the Office Actions to date never made any findings, such as, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made. (See In re Rouffet, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998) (the "factual predicates underlying" a prima facie "obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art")). It is respectfully submitted that the proper test for showing obviousness is what the "combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art". and that the Patent Office must provide particular findings in this regard -- the evidence for which does not include "broad conclusory statements standing alone". (See In re Kotzab, 55 U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000) (citing In re Dembiczak, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (obviousness rejections reversed where no findings were made "concerning the identification of the relevant art", the "level of ordinary skill in the art" or "the nature of the problem to be solved"))). It is respectfully submitted that there has been no such showings by the Office Actions to date or by the Advisory Action.

In fact, the present lack of any of the required factual findings forces both Appellants and this Board to resort to unwarranted speculation to ascertain exactly what facts underly the present obviousness rejections. The law mandates that the allocation of the proof burdens requires that the Patent Office provide the factual basis for rejecting a patent application under 35 U.S.C. § 103. (See In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984) (citing In re Warner, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967))). In short, the Examiner bears the initial burden of presenting a proper prima facie unpatentability case -- which has not been met in the present case. (See In re Oetiker, 977 F.2d 1443, 1445, 24, U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)).

Accordingly, it is respectfully submitted that claims 1 and 3 to 19 are allowable for the above reasons.

CONCLUSION

In view of the above, it is respectfully requested that the rejections of claims 1 and 3 to 19 be reversed, and that these claims be allowed as presented.

Respectfully submitted,

Dated: 10/9/2002

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APPENDIX

1. (Twice Amended) A device for contacting an electrically operated apparatus, comprising: at least one terminal contact on a side of the apparatus, the at least one terminal contact being oriented parallel to an installation direction of the apparatus; and

a plug for connecting axially to the at least one terminal contact, the plug including at least one sleeve contact, the at least one sleeve contact and the at least one terminal contact being adapted to be assembled together parallel to the installation direction, wherein the at least one sleeve contact includes two concentric sleeve contacts and the at least one terminal contact includes two concentric terminal contacts, the two concentric sleeve contacts connecting to the two concentric terminal contacts.

- 3. (Amended) The device according to claim 1, wherein the sleeve contacts are each in contact with the terminal contacts on an outside circumference when joined together.
- 4. (Amended) The device according to claim 1, wherein the terminal contacts have two contact plates bent into a cylindrical shape and situated on an end of a casing of the apparatus.
- 5. (Amended) The device according to claim 1, further comprising an insulation situated between the terminal contacts.
- 6. The device according to claim 5, wherein the insulation includes an insulating sleeve composed of a plastic.
- 7. The device according to claim 5, wherein, in an assembled state, a back wall of the plug acts as a further insulation which, together with the insulation between the terminal contacts, form two contact chambers insulated from one another.
- 8. The device according to claim 1, wherein the at least one sleeve contact includes an interior sleeve contact and an exterior sleeve contact, a printed conductor of the interior sleeve contact passing through a recess in the exterior sleeve contact.

- 9. The device according to claim 1, wherein the at least one sleeve contact includes a cylindrical segment.
- 10. The device according to claim 1, wherein the at least one sleeve contact has a polygonal cross section.
- 11. The device according to claim 1, wherein the at least one sleeve contact has a diameter so as to overcome a predetermined contacting force when connected.
- 12. (Amended) The device according to claim 1, wherein the sleeve contacts have inclined insertion guides.
- 13. (Amended) The device according to claim 1, further comprising a plurality of punched grid conductors connected to the plug.
- 14. The device according to claim 13, wherein a first of the sleeve contacts and a first of the punched grid conductors are a one-piece unit, and a second of the sleeve contacts and a second of the punched grid conductors are a one-piece unit.
- 15. The device according to claim 13, wherein the sleeve contacts are formed by one of bending and folding the punched grid conductors.
- 16. The device according to claim 1, wherein:

the at least one sleeve contact is configured to substantially surround a respective one of the at least one terminal contact when the at least one sleeve contact and the at least one terminal contact are assembled.

- 17. The device according to claim 1, wherein the electrically operated apparatus includes an actuator.
- 18. The device according to claim 1, wherein the electrically operated apparatus includes at least one of an actuator, a hydraulic actuator, a solenoid valve and a pressure regulator.

19. The device according to claim 1, wherein each of the two concentric sleeve contacts has only one circumferentially contiguous contact area.